

- 1. ALL WORK IS TO BE INSTALLED IN ACCORDANCE WITH STANDARDS OF THE CITY OF UNIVERSAL CITY. MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WILL CONFORM TO APPLICABLE CITY OF UNIVERSAL CITY SUBDIVIONS REGULATIONS AND, STANDARD SPECIFICATIONS AND DETAILS.
- 2. FOR ALL REFERENCES TO THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT), THE CONTRACTOR SHALL SEE THEIR CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES, WHICH IS ALSO LOCATED AT WWW.TXDOT.GOV.
- 3. ALL CONCRETE SHALL BE AS DETAILED ON THE PLAN SHEETS AND MEET MATERIAL REQUIREMENTS OF TXDOT ITEM 421, "HYDRAULIC CEMENT CONCRETE".
- 4. ALL REINFORCING STEEL SHALL BE GRADE 60, MEET THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF TXDOT ITEM 440, "REINFORCING STEEL", AND BE LISTED ON THE TXDOT APPROVED LIST OF SUPPLIERS WHICH IS LOCATED AT WWW.TXDOT.GOV.
- 5. CONCRETE CURING SHALL BE WITH AN IMPERVIOUS MEMBRANE APPLICATION AND SHALL MEET THE MATERIAL AND APPLICATION REQUIREMENTS OF THE CITY OF SAN ANOTNIO "MEMBRANE CURING" AND BE LISTED ON THE TXDOT APPROVED LIST OF SUPPLIERS WHICH IS LOCATED AT <a href="Www.txdot.gov">Www.txdot.gov</a>. IN ADDITION TO THE CONTRACTOR APPLYING THE CURING COMPOUND THEY ARE TO INSTALL CONTRACTION/EXPANSION JOINTS ON CONCRETE WORK.
- 6. ALL CONCRETE CONSTRUCTION AND FINISHING SHALL MEET THE REQUIREMENTS OF TXDOT ITEM 420 "CONCRETE STRUCTURES" FOR PUBLIC WORKS CONSTRUCTION.
- 7. THE CONTRACTOR IS REQUIRED TO ATTEND A PRE-CONSTRUCTION CONFERENCE AND SHALL SCHEDULE IT WITH THE CITY PUBLIC WORKS DEPARTMENT (RANDY LUENSMANN AT (210) 658-5364) A MINIMUM OF ONE (1) WEEK PRIOR TO BEGINNING CONSTRUCTION.
- 8. MANHOLES SHALL BE BROKEN BELOW THE FINISH GRADE LEVEL UNTIL THE BASE IS COMPLETED AND THEN RESTORED.
- 9. THE ENGINEER WILL STAKE THE STREET ONE TIME ONLY AND FURNISH CUT SHEETS TO THE STREET CONTRACTOR; ANY CONSTRUCTION STAKES REMOVED OR DESTROYED BY THE CONTRACTOR OR HIS EMPLOYEES WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 10. AN INDEPENDENT TESTING LABORATORY APPROVED BY THE CITY OF UNIVERSAL CITY SHALL PERFORM ALL "FIELD AND LABORATORY TESTING". THE CITY REQUIRES ALL INSPECTION AND/OR TESTING FIRMS TO BE ACCREDITED, QUALIFIED, AND IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM E329, "STANDARD SPECIFICATION FOR AGENCIES ENGAGED IN



CONSTRUCTION INSPECTION AND/OR TESTING". FIRMS MUST PRESENT A COPY OF THEIR CURRENT, OFFICIAL ACCREDITATION BY THE AMERICAN ASSOCIATION FOR LABORATORY ACCREDITATION (A2LA) OR THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) AND CURRENT AMRL AND CCRL PROFICIENCY RESULTS. THE FIRMS SHALL BE ACCREDITED IN ALL MATERIAL TEST PROCEDURES REQUIRED TO BE PERFORMED FOR EACH PROJECT.

- 11. THE CITY SHALL PAY ALL TESTING FOR PUBLIC WORKS PROJECTS UNLESS OTHERWISE AGREED UPON AND APPROVED BY THE CITY. FOR NON- PUBLIC WORKS PROJECTS OR PRIVATE DEVELOPMENTS, THE CONTRACTOR SHALL PAY ALL COSTS OF TESTING. THE FOLLOWING TEST SCHEDULE SHALL BE ADHERED TO:
  - A. ALL IMPORT FILL PLACED IN THE STREET'S SUBGRADE SHALL BE SELECT MATERIAL, WITH A PLASTICITY INDEX LESS THAN FIFTEEN (15), AND COMPACTED IN MAXIMUM EIGHT (8) INCH LIFTS TO 98% DENSITY OF TXDOT'S TEST METHOD TEX 113-E. PROVIDE TESTING ON EACH EIGHT (8) INCH COMPACTED LIFT. SUBGRADE MOISTURE DENSITY TESTING SHALL BE AT THE MINIMUM FREQUENCY OF THREE (3) PER BLOCK AND SHALL NOT TO EXCEED FIVE HUNDRED (500) FOOT SPACING.
  - B. THE RATE OF LIME TREATED/STABILIZED OF THE SUBGRADE SHALL REDUCE THE PLASTICITY INDEX TO 20 OR LESS OR IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH TXDOT ITEM 260, LIME TREATMENT (ROAD-MIXED).
  - C. FLEXIBLE BASE TESTING SHALL INCLUDE P.I., L.L., GRADATION, AND WET BALL MILL OF MATERIAL SHALL BE TESTED UPON DELIVERY TO THE PROJECT AND AS DIRECTED BY THE CITY. MOISTURE DENSITY TESTING SHALL BE AT THE MINIMUM RATE OF THREE (3) PER BLOCK AND SHALL NOT TO EXCEED FIVE HUNDRED (500) FOOT SPACING. THE QUALITY CONTROL TEST ON THE MATERIALS SHALL BE PERFORMED BY THE CONTRACTOR'S CITY APPROVED TESTING FIRM. IN-PLACE DENSITY SHALL MEET THE REQUIREMENTS DETAILED IN THE CITY'S SUBDIVISION REGULATIONS.
  - D. HOT AND WARM MIX ASPHALTIC CONCRETE (HMAC/WMAC) DENSITY IN PLACE DENSITY TESTING SHALL RESULT BETWEEN 92% AND 97% OF THE MAXIMUM THEORETICAL GRAVITY PER TEX 207-F. A SET OF TWO (2) CORES SHALL BE RANDOMLY SAMPLED AT A DISTANCE NOT TO EXCEED FIVE HUNDRED (500) FOOT SPACING PER BLOCK. ALL QUALITY CONTROL NUCLEAR TESTING OF THE IN-PLACE HMAC/WMAC IS FOR QUALITY CONTROL INFORMATION ONLY. THE HMAC/WMAC THICKNESS IS REQUIRED TO BE MEASUREMENT BY CORE. FIELD QUALITY CONTROL PERSONNEL SHALL BE TXDOT LEVEL IB CERTIFIED AND BE PRESENT AT START AND THROUGH THE DURATION OF THE PLACEMENT OPERATONS OF THE HMAC/WMAC TO DOCUMENT DENSITY, THICKNESS, AND COMPACTION AND PLACEMENT OPERATIONS. THE CITY WILL



DETERMINE THE REMOVAL AND REPLACEMENT OF ALL FAILED PRODUCTION AND PLACEMENT HMAC/WMAC TEST RESULTS.

- E. RECYCLED ASPHALT SHINGLES (RAS) SHALL NOT BE USED IN ANY HMAC OR WMAC MIXES.
- F. CONCRETE STRUCTURES A MINIMUM OF ONE (1) SET OF COMPRESSIVE CONCRETE STRENGTH TEST OF 4, SIX (6) INCH DIAMETER CYLINDERS EACH WILL BE TESTED PER EACH STRUCTURE AND THE FREQUNCY SHALL BE NO LESS THAN ONE (1) SET PER SIXTY (60) CUBIC YARDS OF CONCRETE PLACED AND AT LEAST ONE (1) SET PER DAY.
- G. CONCRETE CURB AND SIDEWALK PROVIDE ONE (1) SET OF FOUR (4), SIX (6) INCH DIAMETER CYLINDERS PER EACH 500 LINEAR FEET OF CURB AND/OR SIDEWALK AND AT LEAST ONE (1) SET PER DAY.
- H. THE CONTRACTOR SHALL SUBMIT CONCRETE, WMAC, AND HMAC DESIGNS A MINIMUM OF 2 WEEKS PRIOR TO THE PLACEMENT OF THE MATERIAL.
- 12. ALL SUBGRADE AND FLEXIBLE BASE MATERIALS SHALL BE PROOF ROLLED WITH A HEAVY PNEUMATIC ROLLER (MINIMUM 25 TONS) IN CONFORMANCE WITH TXDOT ITEM 216, "PROOF ROLLING" AND COMPACTED TO THE DENSITY REQUIREMENT SHOWN IN THE CITY OF UC ITEM 200, "FLEXIBLE BASE". TESTS FOR DENSITY WILL BE PERFORMED WITHIN TWENTY-FOUR (24) HOURS AFTER COMPACTION OPERATIONS ARE COMPLETED. IF THE MATERIAL FAILS TO MEET THE DENSITY SPECIFIED, IT SHALL BE REWORKED AS NECESSARY TO OBTAIN THE DENSITY REQUIRED. THE CONTRACTOR SHALL MAINTAIN A MOIST BASE SURFACE AFTER IT HAS BEEN TESTED UNTIL THE NEXT PAVEMENT LAYER IS CONTRUCTED. SOFT AND YIELDING AREAS DISCOVERED SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR EXPENSE.
- 13. SURFACE STRUCTURES SUCH AS MAILBOXES, STREET SIGNS, FENCES, DRIVEWAYS, SIDEWALKS, LANDSCAPING, CONCRETE ISLANDS, CURBS OR CONCRETE DRIVEWAYS, ETC., VISIBLE AT THE TIME OF THE SURVEY ARE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SAFEGUARD AND MAINTAIN ANY AND ALL SURFACE STRUCTURES DURING THE COURSE OF WORK AND TO REPLACE OR REPAIR THOSE ITEMS WHICH ARE DAMAGED BY THE CONTRACTOR WITH LIKE OR BETTER QUALITY AND SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION (NO SEPARATE PAY ITEM).
- 14. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, PROTECT THEM DURING CONSTRUCTION AND REPAIR ANY DAMAGE TO OTHER UTILITIES AT NO COST TO THE CITY OF UNIVERSAL CITY.



- 15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE CITY'S CONSTRUCTION INSPECTOR/TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE/ CONSTRUCTION INSPECTOR, THE TRAFIC CONTROL DEVICES DO NOT CONFORM TO ESTABLISHED STANDARDS, ARE INCORRECTLY PLACED OR INSUFFICIENT IN QUANTITY TO PROTECT THE TRAVELING GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR WILL HAVE THE OPTION OF STOPPING THE OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED AT NO EXPENSE TO THE CITY OF UNIVERSAL CITY.
- 16. CITY TO FURNISH AND INSTALL STREET NAME SIGNS, STOP SIGNS, SPEED LIMIT, YIELD SIGNS, ETC. DEVELOPER SHALL REIMBURSE CITY FOR MATERIAL AND LABOR COSTS.
- 17. THE STREET CONTRACTOR IS REQUIRED TO ADJUST ALL EXISTING MANHOLES (SEE "ADJUSTING EXISTING MANHOLES" OF THE SPECIFICATION) AND WATER VALVES TO MATCH THE GRADE OF THE STREET SECTION OR THE ELEVATION SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 18. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181 ACCESS TO GAS VALVES MUST BE MAINTAINED AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
- 19. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND OTHER UNDERGROUND STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. CONTRACTOR WILL NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO EXCAVATION.

CITY OF UNIVERSAL CITY (210) 658-5364 WATER AND SANITARY SEWER (210) 658-5365 STORM DRAIN (210) 658-5364

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TEXAS STATE WIDE ONE CALL LOCATORS

COSA TRAFFIC SIGNAL OPERATIONS
CITY PUBLIC SERVICE (ELECTRIC AND GAS)
TIME WARNER CABLE

AT&T
MCI

1-800-344-8377
1-800-545-6005 OR 811
210-207-7720

20. CONCRETE CURB SHALL BE CONSTRUCTED WITH A MAXIMUM OF EIGHTY (80) FEET BETWEEN EXPANSION JOINTS AND MARKED AT TEN (10) FOOT INTERVALS WITH APPROVED STEEL MARKING TOOLS. EXPANSION JOINTS SHALL BE

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PLACED AT THE BEGINNING OF ALL RADII AND AT A MAXIMUM OF EIGHTY (80) FOOT INTERVALS AS DIRECTED BY THE ENGINEER.

- 21. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT (PUBLIC WORKS DIRECTOR OR HIS AUTHORIZED REPRESENTATIVE AT 658-5364) PRIOR TO PLACING BACKFILL OR CONCRETE AND PRIOR TO ANY TESTING. CONTRACTOR SHALL REQUEST INPECTIONS A MINIMUM OF 24 HOURS IN ADVANCE. NO INSPECTIONS ARE AVAILABLE BETWEEN 12:00 P.M. AND 1:00 P.M. OR AFTER 4:00 P.M. DAILY, ON WEEKENDS, OR ON CITY HOLIDAYS.
- 22. CONCRETE SIDEWALKS SHALL HAVE TOOLED WEAKENED PLANE JOINTS EVERY FOUR (4) FEET AND DOWELED EXPANSION JOINT WITH ONE QUARTER INCH (1/4) BITUMASTIC MATERIAL SEVENTY FIVE FEET (75) ON CENTER AND ABUTTING EXISTING STRUCTURES.
- 23. ALL WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE CITY OF UNIVERSAL CITY ORDINANCES FOR PUBLIC WORKS CONSTRUCTION AND TXDOT ITEMS 5 AND 6.
- 24. CONTRACTOR SHALL INSTALL CURB FOR HANDICAP RAMPS AS SHOWN ON THE PLANS AND ADA STANDARD PLAN SHEETS.
- 25. CONTRACTOR SHALL PROVIDE BRASS KEYS TO BE USED TO OPEN LOCKING MANHOLE COVERS ON DRAINAGE STRUCTURES DURING PRELIMINARY INSPECTION FOR ACCEPTANCE OF PROJECT.
- 26. ALL TRENCHES PART OF A ROADWAY RECONSTRUCTION OR PROPOSED ROADWAY PROJECT ARE TO BE BACKFILLED AND COMPACTED AS NOTED IN UNIVERSAL CITY STANDARD SPECIFICATIONS AND STANDARD DRAWINGS.
- 27. WHEN UNDER PAVEMENT, ALL UTILITY TRENCHES NOT PART OF A ROADWAY RECONSTRUCTION OR PROPOSED ROADWAY PROJECT ARE TO BE BACKFILLED WITH FLOWABLE FILL FOR THE SECONDARY BACKFILL UP TO THE BOTTOM OF THE BASE MATERIAL GRADE, UNLESS OTHERWISE DIRECTED BY THE CITY. MATCH EXISTING PAVEMENT TYPE, REINFORCEMENT (FOR CONCRETE PAVEMENTS), AND THICKNESS.
- 28. REMOVE EXISTING CURB ON ALL NEW DRIVEWAYS AND PLACE THE COMPLETE PAVEMENT THICKNESS WITH A MINIMUM OF FIVE (5) INCHES THICKNESS ON RESIDENTIAL AND SIX (6) INCHES MINIMUM ON COMMERCIAL; DEPENDING ON TRAFFIC WEIGHT.
- 29. CONCRETE PLACED IN NEW DRIVEWAYS INCLUDING ALLEY'S SHALL MEET A MINIMUM 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
- 30. EXCESS MATERIAL IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER. NO EXCESS MATERIAL SHALL BE DUMPED OR ALLOWED TO ENTER ANY WATERWAY, CULVERT OR OTHER DRAINAGE STRUCTURE. THE CONTRACTOR



SHALL NOT PLACE ANY MATERIAL IN THE 100-YEAR FLOODPLAIN WITHOUT OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

- 31. ANY WORK COMPLETED WITHOUT PRIOR AUTHORIZATION WHETHER INCLUDED IN THE PLANS AND SPECIFICATIONS OR NOT, SHALL NOT BE COMPENSATED BY THE CITY OF UNIVERSAL CITY.
- 32. IF THE STREET HAS BEEN CONSTRUCTED AND ACCEPTED, ANY NEW OPEN CUT UTILITY TRENCHES SHALL USE FLOWABLE FILL CONSTRUCTED TO THE BOTTOM OF THE SURFACE LAYER. NO OPEN CUT TRENCHES WILL BE ALLOWED ON ANY STREET LESS THAN TWO (2) YEARS OF AGE. IF THE OPEN CUT TRENCH IS REQUIRED AND APPROVED, THE UTILITY ENTITY WILL MILL AND OVERLAY THE ENTIRE STREET BLOCK AS DIRECTED BY THE ENGINEER.
- 33. ALL UTILITY INSTALLATIONS PLANNED FOR A DEVELOPMENT WILL REQUIRE PROGRESS MEETINGS WITH THE CITY OF UC STAFF THROUGHOUT THE DESIGN OF THE UTILITY PLANS. UPON SUBMITTAL OF THE FINAL ROADWAY DESIGN PLANS, THE UTILITY COMPANY MUST SUBMIT THEIR SET OF PLANS AND THE PRIME CONSULTING FIRM WILL CREATE A MASTER UTILITY SHEET(S) COORDINATING THE HORIZONTAL AND VERTICAL ALIGNMENTS AND ANY JOINT VENTURES.
- 34. ALL UTILITY COMPANIES ARE RQUIRED TO SUBMIT A LETTER STATING THEY HAVE COMPLETED ONE HUNDRED (100) PERCENT INSTALLATION OF THEIR SYSTEM PRIOR TO THE PRIME CONTRACTOR'S PLACEMENT OF THE FINAL PAVEMENT'S SURFACE COURSE.